# Tenacity of active duty, ANG E&I teams create fiber backbone for Southwest Asia operations

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ZANESVILLE, Ohio — Engineering and Installation, or E&I as it is better known, is comprised of less than 2,300 Air Force communication professionals. Of those, 165 are active duty members assigned to the 85th Engineering Installation Squadron, Keesler AFB, Miss. However, the majority of E&I specialists are assigned to the 18 Air National Guard Squadrons; volunteer reservists with multiple skills obtained from both their Air Force specialty and civilian occupation.

This cadre of highly trained and dedicated personnel has provided and continues to provide exceptional communications support to warfighters past and present.

# Witnessed first hand

In July 2001, I volunteered for an Air Expeditionary Force tour and was assigned to the J6 staff. As the lead of the E&I forward element, it was my responsibility to support the myriad of E&I projects with material, equipment and personnel. During that time, E&I had engineered and had begun the installation of infrastructure for Desert Shift, the move of coalition forces from Eskan Village, Saudi Arabia to Prince Sultan AB. E&I played a crucial



Staff Sgt. Harold Mc-Nicol, 220th Engineering and Installation Squadron, works on fiber upgrades in the Iraqi Embassy.

role in the installation of the fiber backbone for the Combined Air Operations Center, Coalition Headquarters and the Joint Intelligence Center. This backbone, which also included SIPRNET and NIPRNET connectivity for the then Joint Task Force-Southwest Asia, was also installed by E&I.

My second rotation with the J6 started just before the attacks of Sept. 11.

By then, E&I specialists were upgrading existing systems in the PSAB CAOC, installing a fiber infrastructure to the new CAOC and coalition compound in Al Udeid AB, Qatar, and were also making numerous improvments throughout the theater. Teams assigned to PSAB worked around the clock to ensure all systems were operating at peak performance. Extensive upgrades to the battle cab and the CAOC floor were required to meet the needs of the influx of military personnel

and equipment. There was no project too big or too small for installation teams, and the tenacity of E&I personnel was never more evident than during that period.

On any given day, rotations of 30-50 E&I personnel continue to support the warfighter in all areas of operations. From the installation of a fiber ring around Baghdad International Airport and preventive maintenance inspections of radio antennas perched high above Baghdad to the installation of NIPRNET and SIPRNET in the Iraqi Embassy and installation of 7,000 feet of copper cable from the switch to the new control tower, the total force E&I community continues to meet the communications needs of the Joint Forces



The E & I community's total force is making a difference on every front.

# **JARGON WATCH**

- **E&I**: Engineering and Installation
- **▶ NIPRNET**: Non-classified Internet Protocol Router Network
- **▶ SIPRNET**: Secure Internet Protocol Router Network.
- > CAOC: Combined Air **Operations Center**
- **PSAB**: Prince Sultan Air Base
- **AEF**: Air Expeditionary Force
- **▶ J6**: Joint Staff, Director for Command, Control, Communications and Computers